

VI.—Results of deep dredging off the Mull of Galloway, by Capt. BEECHEY, R.N. Drawn up by Wm. THOMPSON, Esq., Vice-Pres. Nat. Hist. Society of Belfast.

CAPTAIN BEECHEY, the distinguished navigator, having in the month of April last been engaged in a survey of part of the Scottish coast in H.M. steam-vessel Lucifer, most kindly undertook to use the dredge in the deepest water in which his soundings might be made, and the following are the highly interesting results obtained on three occasions; the products from the different depths being most carefully kept separate.

Species obtained.	From 50 fathoms, 8 miles S.S.W. the Mull of Galloway.			From 110 to 140 fathoms, 5 miles S.W. the Mull of Galloway.			From 145 fathoms in Beaufort's Dyke*.		
	No. of living specimens.	No. of dead specimens.	Observations.	No. of living specimens.	No. of dead specimens.	Observations.	No. of living specimens.	No. of dead specimens.	Observations.
MOLLUSCA.									
Trochus papillosus	1	...	Adult .....	...	...	.....	1	1	
— millegranus	...	...	A few alive and several dead.	...	...	Many dead and broken; chiefly small.	2	...	A few dead.
— tumidus	...	...	.....	...	...	A few dead .....	...	...	A few dead.
Cypræa europæa	...	2	.....	...	...	Ditto .....	...	...	Ditto.
Fusus turricola	...	1	.....	...	...	Ditto .....	...	...	
— muricatus	...	...	.....	...	...	Ditto .....	1	2	
— Bamffius	...	...	.....	...	...	Ditto .....	...	...	A few dead; small.
— linearis	...	...	.....	1	...	.....	...	...	
— costatus	...	...	.....	...	...	.....	1	...	Large.
— corneus	...	...	.....	2	...	Small .....	1	...	Small.
Buccinum undatum	...	...	.....	1	...	Ditto .....	...	1	
Natica Alderi	...	...	.....	1	...	.....	...	...	
— Montagui	...	...	.....	3	...	.....	...	...	
Nasa macula	...	...	.....	...	...	.....	...	1	
Tornatella tornatilis	...	...	.....	...	...	.....	...	1	
Eulima polita	...	...	.....	...	...	.....	2	...	Perfect.
Capulus hungaricus	...	...	.....	...	...	A few dead; small .....	2	...	Small.
Emarginula fissura	...	...	.....	...	...	Many dead .....	...	...	Several dead.
Chiton fuscatus, Br.	...	...	.....	...	...	.....	1	...	
— discrepans, Br.?	...	...	.....	...	...	.....	1	...	
Dentalium entalis	3	...	Several dead.	...	...	Several small; some alive.	...	...	A few living.
—									
Astarte Damnoniæ	...	...	Odd valves .....	...	...	Several; alive .....	...	...	A few odd valves.
— scotica	...	...	.....	...	...	Several odd valves; chiefly small.	...	...	Ditto; small.
Lucina radula	...	...	.....	...	...	Odd valve.	...	...	
Venus virginea	...	2	.....	...	...	Odd valves; medium size.	...	...	A few odd valves; one perfect shell.
— ovata	...	...	Several dead.	...	...	Ditto chiefly; a few alive.	...	...	Very few alive; and some odd valves.
— cassina	...	...	A few young, alive.	...	...	Ditto; several small.	...	...	A number of odd valves of all sizes.

\* A remarkable dyke, beginning about 5 miles S.W. the Mull of Galloway, and extending northward nearly to Corsewall. It is from a mile to a mile and a quarter wide. Its average depth in the centre is 130 fathoms.

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<i>Myrtea spinifera</i> ...	...	...	.....	...	...	.....	...	...	One valve.
<i>Saxicava rugosa</i> ...	...	...	.....	...	...	A few odd valves.	...	...	
<i>Nucula minuta</i> ...	...	...	Odd valves ...	...	...	Many ditto ..	1	...	
— <i>margaritacea</i> ...	...	...	Ditto .....	...	...	Ditto ditto ; small ...	...	...	A few odd valves.
<i>Cardium nodosum</i> , (Turt. Bivalves.)	...	...	A number, chiefly alive.	...	...	Ditto ditto .....	...	...	Ditto.
<i>Pectunculus pilosus</i> ...	...	...	.....	...	...	.....	...	...	An odd valve.
<i>Pecten obsoletus</i> ...	1	...	Several dead ..	...	...	A few odd valves ; all sizes.	...	...	Several odd valves.
— <i>opercularis</i> ...	...	...	Young, odd valves.	...	...	A few odd valves ; very small.	...	...	Ditto ; small.
— <i>sinuosus</i> .....	...	...	.....	...	...	Ditto ; medium size.	...	...	Two odd valves.
<i>Lima fragilis</i> .....	...	...	.....	...	...	A few odd valves.....	1	...	Several odd valves.
<i>Mactra elliptica</i> ? ..	...	...	Odd valve.....	...	...	Ditto .....	...	...	Two odd valves.
<i>Amphidesma pris-</i> <i>maticum</i> .....	...	...	Ditto.	...	...	.....	...	...	
— <i>Boysii</i> .....	...	...	.....	...	...	Odd valve.	...	...	
<i>Montacuta substri-</i> <i>ata</i> .	1	...	On <i>Spatangus</i> <i>purpureus</i> .	...	...	A few alive on <i>Spa-</i> <i>tangus purpureus</i> .	...	...	
<i>Modiola communis</i>	2	...	Small .....	2	...	Living specimens very small ; several odd valves of moderate size.	...	...	Numerous odd valves ; moderate size.
— <i>discors</i> .....	...	...	.....	...	...	.....	1	...	
<i>Mya truncata</i> .....	...	...	.....	...	...	.....	...	...	Odd valve.
<i>Anomia</i> .....	...	...	Odd valve.....	...	...	Many odd valves .....	...	...	A number of odd valves.
<i>Orbicula Norvegica</i> (Crania) .....	...	...	.....	...	...	.....	1	...	
<i>Terebratula aurita</i> CIRRIPEDA.	...	...	.....	1	...	Perfect .....	...	...	Two odd valves.
<i>Balanus</i> .....	...	...	.....	...	...	Fragments .....	...	...	Fragments.
<i>Creusia verruca</i> ...	...	...	.....	...	...	Few specimens.	...	...	
ECHINODERMATA.	...	...	.....	...	...	.....	...	...	
<i>Asterias papposa</i> ...	...	...	.....	...	...	One small.	...	...	
<i>Echinus sphaera</i> , Mull. ....	...	...	.....	1	1	Very small.	...	...	
— <i>miliaris</i> , Leske	...	...	.....	1	1	Ditto.	...	...	
<i>Spatangus purpu-</i> <i>reus</i> .	...	...	A few small and alive.	...	...	Many alive ; all under half size.	...	...	
<i>Amphidotus roseus</i>	...	...	.....	4	...	.....	...	...	
<i>Echinocyamus pu-</i> <i>sillus</i> .	...	...	A few living and dead.	...	...	A few alive ; many dead.	...	...	A number, dead.
CRUSTACEA (all living).	...	...	.....	...	...	.....	...	...	
<i>Ebalia Bryerii</i> .....	2	...	.....	...	...	.....	...	...	
— <i>Pennantii</i> ...	3	...	.....	...	...	.....	...	...	
<i>Eurynome aspera</i> ...	1	...	.....	...	...	.....	...	...	
<i>Hyas coarctatus</i> ...	...	...	.....	4	...	.....	...	...	
<i>Inachus scorpio</i> ...	...	...	.....	1	...	Small.	...	...	
<i>Pagurus Bernhardus</i>	1	...	In <i>Buccinum</i> <i>undatum</i> .	...	...	.....	...	...	No crustacea.

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<i>Galathea rugosa</i> ...	...	...	.....	...	...	Several small; none exceeding in body 1½ inch in length.			
<i>Arcturus longicornis</i> , Westwood...	1								
ANNELIDA.									
<i>Aphrodita aculeata</i> ...	...	...	.....	1					
ZOOPHYTES*.									
<i>Plumularia falcata</i> .	1†	...	.....	2†					
— <i>myriophyllum</i> ...	...	...	.....	2					
<i>Sertularia abietina</i> .	1								
— <i>cupressina</i> ...	...	...	.....	2					
— <i>pinaster</i> , Solander and Ellis ‡	...	...	.....	2	...	One specimen.			
<i>Tubularia indivisa</i> .	...	...	.....	2	...	Ditto.			
<i>Campanularia dumosa</i> .....	...	...	.....	2	...	.....	3†	...	Excepting this there are crustaceous species only, as <i>Lepralia</i> , &c.
<i>Farcinia salicornia</i> ..	...	...	.....	2					
<i>Crisia cornuta</i> .....	...	...	.....	2					
<i>Cellepora ramulosa</i> .	1	...	.....	2					
— <i>Skenei</i> .....	...	...	.....	2	...	One specimen.			
<i>Flustra foliacea</i> ...	1								
— <i>truncata</i> .....	1								

I beg, in connexion with this and the preceding catalogue (by Mr. Hyndman), to call the attention of naturalists interested in the study of the Mollusca to the results obtained in a third locality on the western coast of Scotland—at Oban—by Mr. Jeffreys, published in Sowerby's 'Malacological Magazine' (No. 2, 1839). Mr. Jeffreys obtained "*Terebratula aurita* § plentifully in about 15 fathom water," and along with it found "*Crania personata* not uncommon." He procured also the three species of *Lima*—*L. tenera*, *L. fragilis*, *L. subauriculata*—taken off Sana Island. *Nucula minuta* was dredged at Oban as well as off the Mull of Galloway; it has been procured on different occasions by deep dredging in Belfast bay, and many years ago was found at the Giant's Causeway. The *Myrtea spinifera*, of which a single valve was

\* No *Algæ* were brought from any of the three depths.

† These numbers denote the different depths at which the species of Zoophytes were found; No. 1. at 50, No. 2. at 110, No. 3. at 145 fathoms.

‡ *S. margarita*, Hassall, seems to be identical with this. My specimen is without vesicles. It agrees with the description and magnified figure of Solander and Ellis better than the figure of natural size.

§ This species was dredged in Belfast bay by the collectors attached to the Ordnance Survey.

brought up off the Mull of Galloway, was found to be not uncommon in deep water at Oban—on the strand at Red Bay, county of Antrim, I found an example of this shell. *Trochus papillosus* and *Eulima polita*, dredged by Capt. Beechey, were not procured at the more northern localities, Sana island\* and Oban—of the latter species, a single living example was taken in the course of the Ordnance Survey in Belfast bay. The most northern locality on the Irish coast, in which it had hitherto been obtained, was Dublin bay.

Many observations are suggested by these catalogues, and others of a similar nature in my possession, but to my friend Mr. E. Forbes must be left the treatment of a subject in which he of all men possesses the most ample and important data.

VII.—On a new British species of *Alchemilla*. By CHARLES C. BABINGTON, M.A., F.L.S., F.G.S., &c.

IN looking over the valuable herbarium belonging to W. Borrer, Esq., I was gratified by finding in it an original *wild* specimen of *Alchemilla*, gathered by the late Mr. G. Don upon the Clova Mountains, in Scotland, many years since, and considered by him as a species quite distinct from *A. alpina*. Upon a careful examination of the specimen and also of a living plant in Mr. Borrer's garden, I was soon convinced that the plant was indeed a distinct species, although it may be found in almost all the British botanical and other curious gardens under the name of *alpina*, the true *alpina* being often nameless in the same collections. Upon inquiry I have always found, that whenever the original source was known from which the roots were obtained, they are stated to have been sent by Mr. G. Don from Scotland. Upon showing the plant to the late lamented Prof. Don, he also informed me that his father had found it in Scotland.

Having now satisfied myself that the plant was a distinct species, and also that it came from the Highlands, I took all the means in my power to ascertain its identity with some described species, but having totally failed, I feel convinced that it has escaped the notice of botanists. It was denominated *A. argentea* by Mr. Don, but that name was never published, and as Lamarck employed the same name for *A. alpina*, I have considered it advisable to give a new name to this plant, as the employment of *argentea* (although a most excellent and descriptive name) would only tend to create confu-

\* In June 1842, Mr. Hyndman dredged a full-grown *Trochus papillosus* near Sana Island.